

Laser Light Localizer

SP

Startup

Option

Startup Instructions

Valid for:
SIREMOBIL Compact
ARCADIS Varic

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Safety information

NOTICE

This product contains two Class 2 lasers. (U.S.A.: Laser class 2).

- ⇒ Observe the safety information in ARTD-002.731.03...
 - ⇒ When working with the laser light localizer, do not look directly into the laser beam.
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NOTE

Even though there is no immediate risk of eye injury, you should not look into the laser beam.

Additional notes

These setting instructions apply to installation of a laser light localizer on a SIREMOBIL Compact or ARCADIS Varic system.

This document can also be used for adjustment procedures during service and maintenance work. Store it in a safe location together with the adjustment device.

NOTICE

Removing and inserting boards.

⇒ **Switch off the system before removing or inserting boards!**

Protective conductor resistance test


After all work has been completed and all covers have been installed, perform the protective conductor test according to ARTD-002.731.17. The protective conductor resistance must not exceed 0.2 ohms.

Measuring devices and aids required

(per ARTD)

- Toolbox
- Adjustment device for laser light localizer (included with laser light localizer delivery 37 79 001 G5429)
- Protective conductor meter, item no. 44 14 899 RV090

Start-up

- Press  to switch on the laser light localizer while the C-arm is switched on. The laser light localizer automatically shuts off after 5 minutes.
- Position the C-arm in the preferred position for operation, i.e. horizontally with the C-arm lowered.
- Rotate the I.I. attachment so that the crosshairs are aligned horizontally/vertically.

Adjusting the laser light fan beams in relation to the I.I. attachment

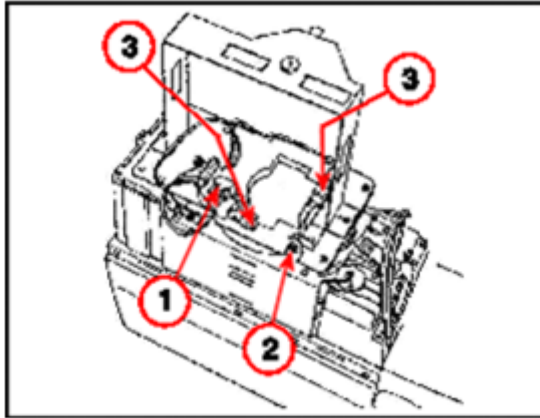


Fig. 1: I.I. attachment

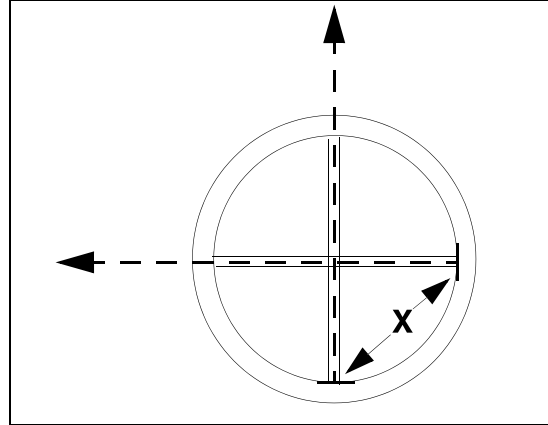


Fig. 2: Laser light fan beam

- Set the excentrics (1/Fig. 1 / p. 9) and (2/Fig. 1 / p. 9) to the "zero position".
- Loosen the screws (3/Fig. 1 / p. 9) until the laser diodes can be turned in their holders.

NOTICE

Lens out of focus

⇒ Do not turn the lens of the laser diodes.

- Turn the diodes in the holder until the laser light fan beams are reflected on the I.I. as shown in (Fig. 2 / p. 9). The laser light fan beams start at (X/Fig. 2 / p. 9). This setting ensures that the laser light fan beams cross near the laser light localizer.
- Retighten the screws (3/Fig. 1 / p. 9).

Attaching the adjustment device

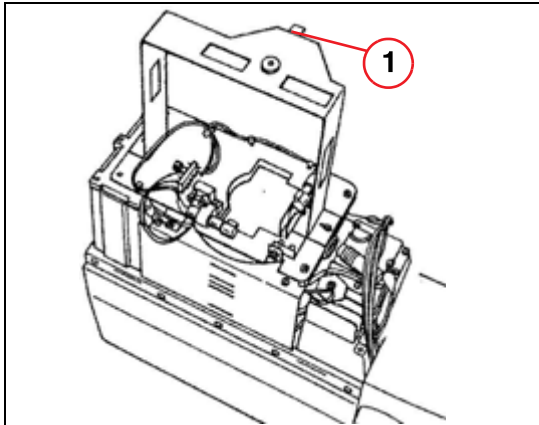


Fig. 3: I.I. attachment

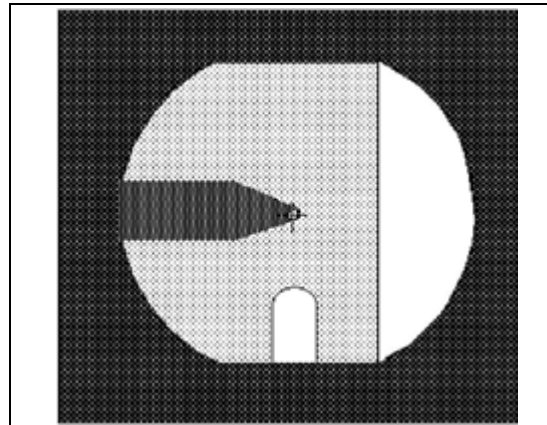


Fig. 4: Pointer

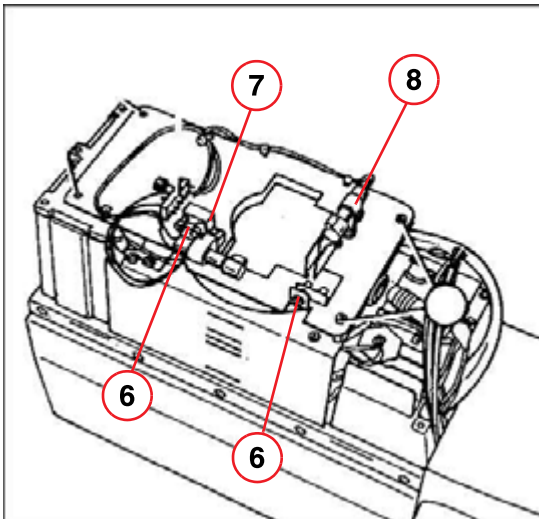


Fig. 5: I.I.

- Attach the adjustment device above the laser light localizer as shown in [\(Fig. 3 / p. 10\)](#).

Adjusting the laser diodes in relation to the central beam



- Briefly switch on fluoroscopy.
- The pointer (1/Fig. 3 / p. 10) of the adjustment device and the crosshairs of the I.I. attachment are displayed on the monitor.



- Readjust the pointer and then briefly release fluoroscopy until it is displayed on the monitor as shown in (Fig. 4 / p. 10).
- Use the adjusters (6/Fig. 5 / p. 10) to align the laser light fan beams with the lines of the I.I. attachment. The laser light fan beams must now cross exactly at the hole of the pointer.

In case of deviation:

- Loosen the screws for laser diode V1 (7/Fig. 5 / p. 10) or the screw for laser diode V2 (8/Fig. 5 / p. 10).
- Shift the laser diode according to the deviation.
- Retighten the screw (7/Fig. 5 / p. 10) or (8/Fig. 5 / p. 10).
- Use the adjusters (6/Fig. 5 / p. 10) to align the laser light fan beams with the lines of the I.I. attachment. The laser light fan beams must now cross exactly at the hole of the pointer.
- Repeat the adjustment procedure if necessary.
- Remove the adjustment device from the laser light localizer and store in a safe location. The adjustment device is required for subsequent service and maintenance work.
- Secure the screws (7/Fig. 5 / p. 10) and (8/Fig. 5 / p. 10) with Loctite.

Final steps and functional test

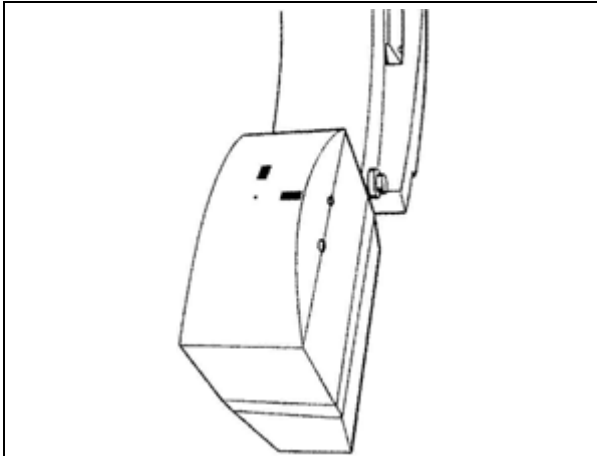


Fig. 6: Cover

- Replace the cover and secure using the cover screws ([Fig. 6 / p. 12](#)).
- These setting instructions can be used for adjustment procedures during subsequent service and maintenance work.
- Switch on the laser light localizer. The two lasers must shut off automatically after 5 minutes.
- Perform the protective conductor test for the complete system.

Checking the labels

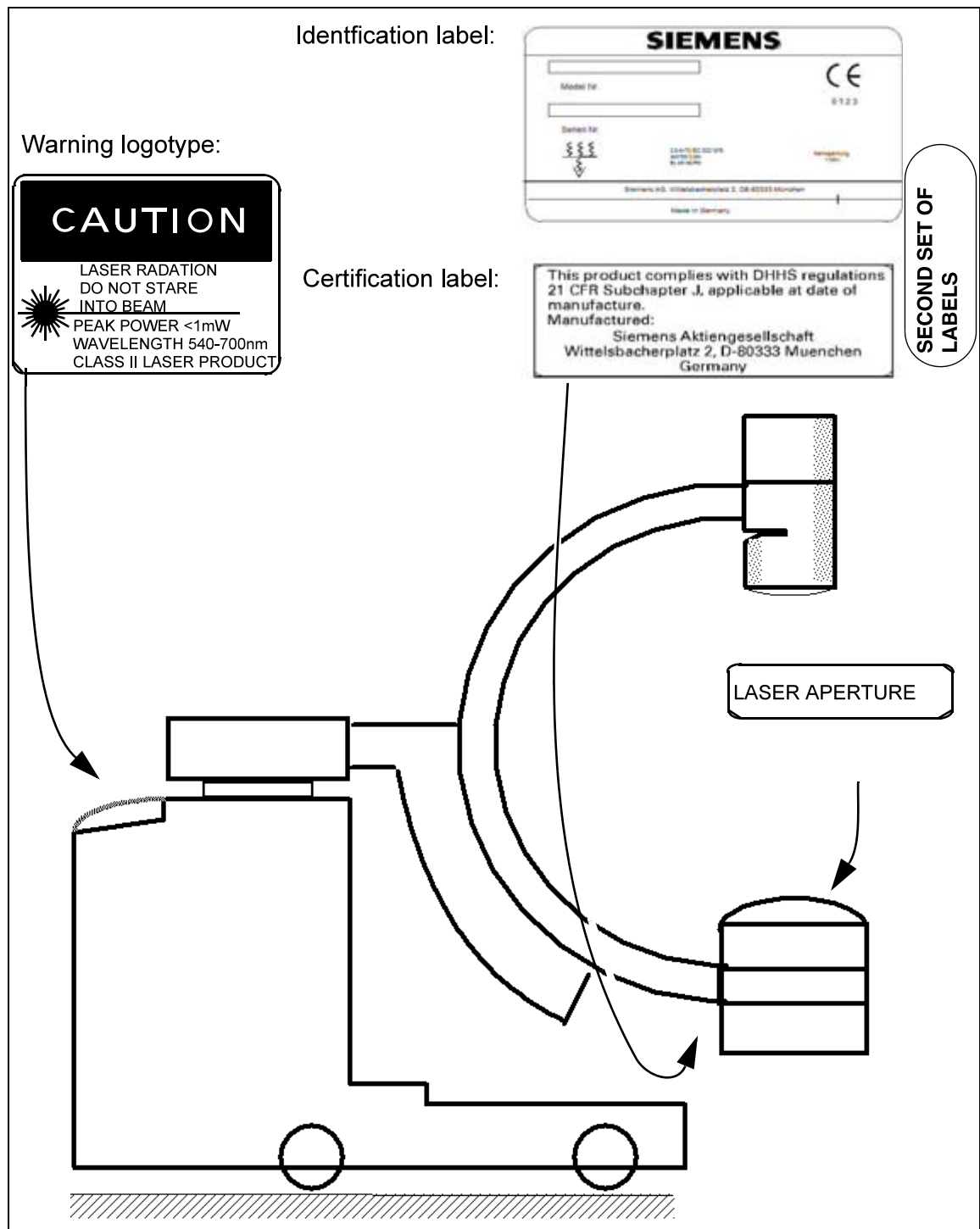


Fig. 7: Checking the identification labels

Labels for U.S.A.

- Check the identification label, "Laser class 2" warning logotype, DHHS certification label, and the two laser aperture labels according to (Fig. 7 / p. 13) and (Fig. 7 / p. 13).

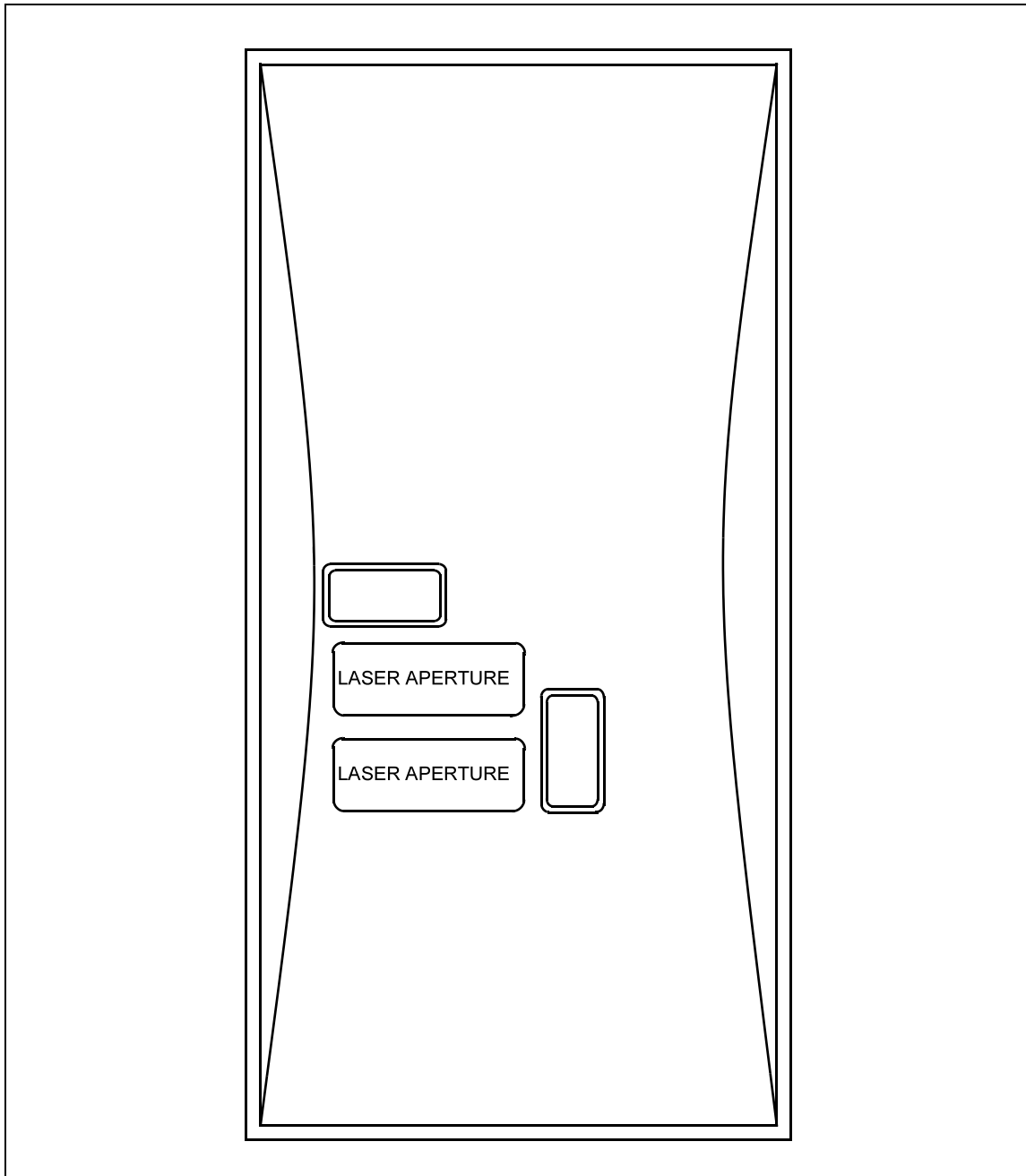


Fig. 8: Label for C-arm side

Affixing the labels for Great Britain and other countries

Great Britain Warning label according to IEC 825 (text) in local language. Check warning label according to IEC 825 (symbol) and identification label. Also check laser aperture labels (Fig. 8 / p. 14).

Other countries Warning label according to IEC 825 (text) in local language.
Check warning label according to IEC 825 (symbol) and identification label.

Warning labels according to IEC 825

Use text according to local language:

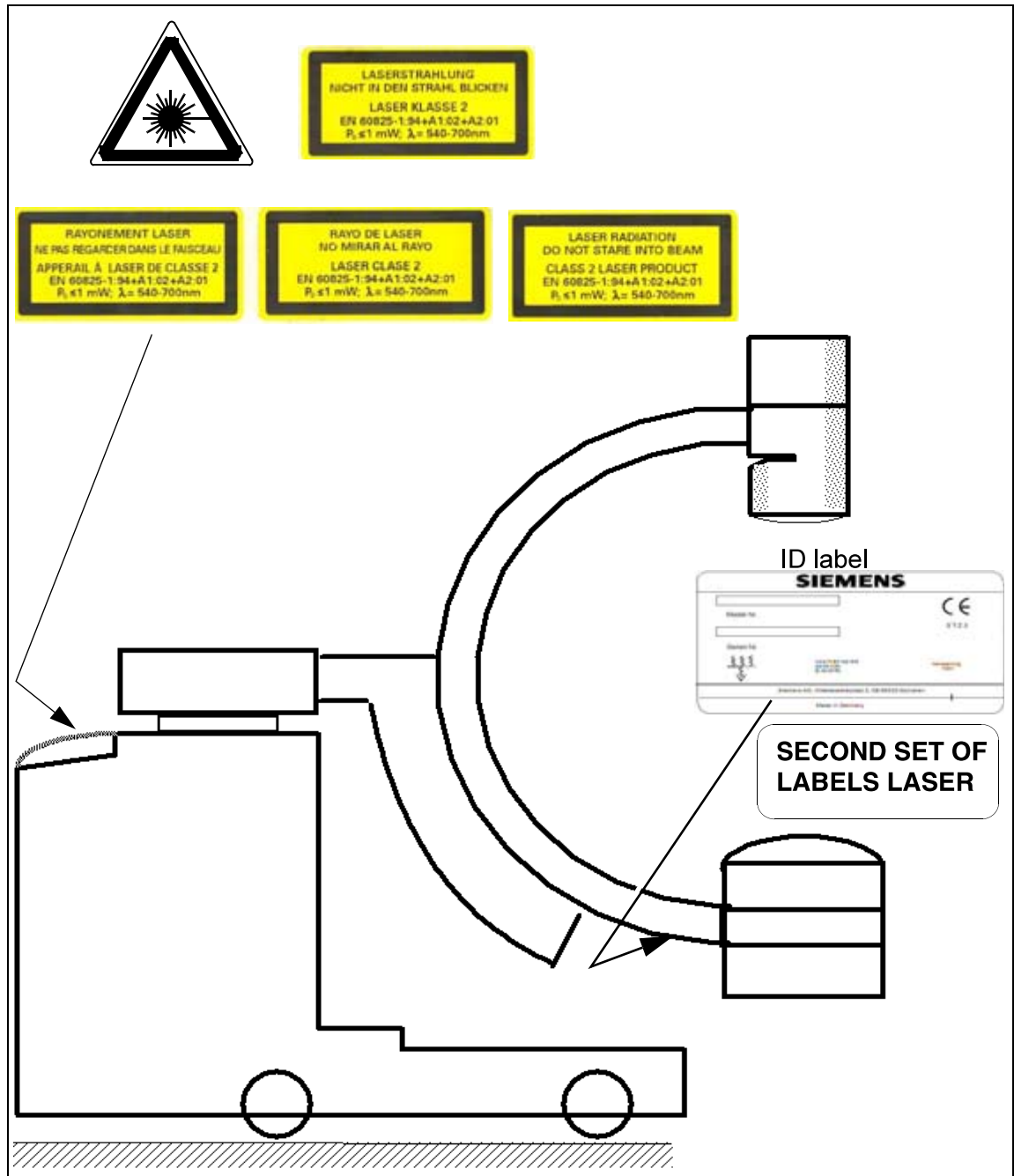


Fig. 9: Affixing the warning labels

Maintenance

Mechanical safety

- Ensure that the laser light localizer is labeled as described in this document. Replace any labels that are damaged.
- Secure the I.I. attachment to the I.I. ring. Ensure that it is seated properly and locked into place.
- Check the I.I. ring for mechanical damage.
- Check the laser aperture on the tube cover for damage.
- Ensure that the laser light fan beams are set as described in this document.

Checking the operating values

- Check the function of the "Laser light localizer on/off" button on the operating console of the basic unit.
- Switch the laser light localizer back on.
 - ⇒ The laser diodes must shut off automatically after 5 minutes.

Cover sheet changed

